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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,024	07/25/2003	H. Randall Shriver	5790	3345

7590

09/21/2005

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EXAMINER

SANDERS, KRIELLION ANTIONETTE

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

10

Office Action Summary

Application No.

10/628,024

Applicant(s)

SHRIVER, H. RANDALL

Examiner

Kriellion A. Sanders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The terms "effective amount and parts" in claim 1 are relative terms which render the claims indefinite. The terms "effective amount and parts" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "parts" does not refer to a specific unit of measurement, such as weight or moles.
4. Claim 2 incorrectly depends upon itself so can not be understood. Claims 3-12 depend directly or indirectly upon claim 2.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No.

10/628,056 in view of Woodson et al, 6,604,567

This is a provisional obviousness-type double patenting rejection.

The US Patent application is identical to applicant's claims with the exception that it also includes 1-10 parts of an alkyl silicate in the compositions. The claims of the application include a fatty acid ester.

Woodson et al discloses A foundry binder system, which will cure in the presence of sulfur dioxide and a free radical initiator, comprising: (a) 20 to 70 parts by weight of an *epoxy* resin; (b) 5 to 50 parts by weight of an acrylate; (c) 1 to 20 of an alkyl silicate; and (d) an effective amount of a peroxide. Woodson et al documents that the alkyl silicates are conventional additives in acid curing epoxy foundry binding systems. The use of the term "comprising" in applicant's present claims does not preclude the inclusion of additional components which do not effect the composition. Therefore, there is no patentable difference between the present claims and the invention of Application No. 10/628,056 when taken in view of Woodson et al., since Woodson et al documents that alkyl silicates are conventional additives.

Claims 1-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6604567. Although the

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conflicting claims are not identical, they are not patentably distinct from each other because

Claims 1-12 are rejected over claims 1-15 of US Patent No. 6604567.

The patent discloses a composition comprising a foundry resin, peroxide and acrylate component. Patentee indicates that an alkyl ester of a fatty acid may also be included in the compositions. See the specification at col. 4, lines 28-50. Woodson's use of the term "comprising" in the claims does not preclude the inclusion of additional components, such as a fatty acid ester, which do not effect the composition. Therefore, there is no patentable difference between the present and patented inventions.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodson US Patent No. 4806576 in view of Woodson et al., US Patent No. 6,604,567.

7. Woodson discloses curable epoxy resin compositions comprising acid curable epoxy resins and a minor amount of an oxidizing agent which is capable of reacting with sulfur dioxide to form a catalyst for curing said epoxy resin. These curable epoxy resin compositions are useful in preparing formed, shaped, filled bodies such as abrasive articles, foundry cores and molds. Suitable epoxy resins for purposes of the invention include diglycidyl ethers of bisphenol A and the diglycidyl ethers of other bisphenol compounds such as bisphenol B, F, G and H.

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Cycloaliphatic group-containing epoxy resins are contemplated for use in the invention. Another class of epoxy resins useful in the patented invention is the novolacs, particularly the epoxy cresol and epoxy phenol novolacs. The epoxides are used in an amount of 30-50 pbw of the composition. A suitable oxidizing agent for use with the epoxy resins of the patented invention is cumene hydroperoxide. The sulfur dioxide used to cure the epoxy resins of the invention may be presented in a stream of a carrier gas. See col. 6, lines 12-62. The cold box process for foundry preparation is disclosed by patentee. The Woodson reference differs from applicant's invention in that it fails to teach the inclusion of a fatty acid ester. Woodson et al discloses a composition comprising a foundry resin, peroxide and acrylate component. Patentee indicates that an alkyl ester of a fatty acid may also be included in the compositions as a solvent. See the specification at col. 4, lines 28-50.

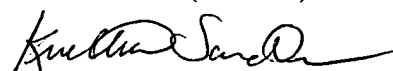
It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the fatty acid esters of Woodson et al as an inert solvent in the foundry compositions of Woodson, since Woodson's use of the term "comprising" in the claims does not preclude the inclusion of additional components which do not materially effect the composition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 6:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kriellion A. Sanders
Primary Examiner
Art Unit 1714

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